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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,242	03/22/2004	Walter Hegel	2694-0144P	9065

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

LEE, CHUN KUAN

ART UNIT	PAPER NUMBER
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2181

DATE MAILED: 08/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/805,242	Applicant(s) HEGEL, WALTER	
	Examiner Chun-Kuan (Mike) Lee	Art Unit 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Fritz Fleming

FRITZ FLEMING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/22/2004.

- 4) ☐ Interview Summary (PTO-413) 8/15/2006
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 14 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

As per claim 14, it appears unclear as to how the safety bus system of independent claim 1 is further limited in the dependent claim 14, as the safety bus system does not appear to further comprise any claim limitation(s).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 1-3, 5 and 9, each of the respective claims comprise the claimed limitation "and/or", therefore it appears unclear if the claimed limitation should be "and" or "or." Examiner will assume the claimed limitation "or" for the current examination.

As per claims 4, 6-8 and 10-14, claims 4, 6-8 and 10-14 are rejected at least due to direct or indirect dependency on the rejected independent claim 1.

As per claim 14, it appears unclear as to what claim limitation(s) is further included into the safety bus system in the dependent claim 14. As the independent claim 1 claimed a safety bus system and the dependent claim 14 claimed a tabletting machine comprising the safety bus system of independent claim 1, therefore it appears that the safety bus system in the independent claim 1 does not include any further limitation(s). Examiner will assume the limitation that "the safe bus system to be utilized in a tabletting machine" for the current examination.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Jensen et al. (US Patent 4,817,009).

4. As per claim 1, Jensen teaches a safety bus system (Fig. 1) comprising:
at least one bus-capable module (Fig. 1, ref. 60, 68, 80, 110, 150);
at least one bus controller (Fig. 1, ref. 100); and
at least one bus line (Fig. 1, ref. 70, 90) interconnecting the at least one bus-capable module and the at least one bus controller (Fig. 1),
wherein at least one safety function (limit block 176 of Fig. 2) can be implemented by the safety bus system, and the at least one safety function may be performed essentially simultaneously with at least one control function (Fig. 1, ref 80, 110, 150) or at least one measurement function (Fig. 1, ref. 60) (col. 4, ll. 63-67; col. 5,

Application/Control Number: 10/805,242

Art Unit: 2181

ll. 15-27 and col. 7, ll. 9-14), wherein the limit block ensures the safe operation essentially simultaneously while temperature is measured (i.e. measurement function) or while the control signal (i.e. control function) is outputted.

5. As per claim 2, Jensen teaches the safety bus system comprising wherein at least one analog signal may be processed by means of the at least one safety function or the at least one control function or the at least one measurement function (col. 3, ll. 22-29), wherein the bus controller is an analog computer, therefore the signal processed would be analog signal.

6. As per claim 3, Jensen teaches the safety bus system comprising wherein at least one digital signal may be processed by means of the at least one safety function or the at least one control function or the at least one measurement function (col. 3, ll. 22-29), wherein the bus controller is an digital computer, therefore the signal processed would be digital signal.

7. As per claim 4, Jensen teaches the safety bus system comprising wherein at least one of the at least one safety functions is a safety window, an enclosure switch, or an emergency stop function (col. 7, ll. 9-14), wherein the limit block have the safety window defied by the high and low limit values.

Art Unit: 2181

8. As per claim 5, Jensen teaches the safety bus system comprising wherein at least one of the at least one bus-capable modules includes at least one actuator (Fig. 1, ref. 150) or at least one sensor (Fig. 1, ref. 60) or at least one display (col. 4, ll. 63-67 and col. 5, ll. 28-41).
9. As per claims 6-7, Jensen teaches the safety bus system comprising wherein at least one of the at least one bus-capable modules includes at least one commanding means, wherein the at least one commanding means is a switch, button, emergency off switch, or sensor (Fig. 1, ref. 80, 110 and col. 5, ll. 28-41), wherein the pressure transducer (Fig. 1, ref. 80) with a pressure measuring device (i.e. sensor) senses the pressure and outputs the corresponding signal to enable the pressure controller (Fig. 1, ref. 110) to output the command for controlling of the control valve (Fig. 1, ref. 150).
10. As per claims 8-9, Jensen teaches the safety bus system comprising wherein at least one of the at least one bus-capable modules includes at least one signaling means, wherein the at least one signaling means produces at least one optical signal or at least one acoustic signal or at least one mechanical signal (col. 3, ll. 15-18), wherein the signaling means produce mechanical signal.
11. As per claims 10-11, Jensen teaches the safety bus system comprising wherein at least one of the at least one bus-capable modules includes at least one actuator (Fig.

Art Unit: 2181

1, ref. 150), wherein the at least one actuator is electromechanical, electromagnetic, piezoelectric, pneumatic, or hydraulic (col. 3, ll. 65-68).

12. As per claim 12, Jensen teaches the safety bus system comprising wherein the at least one bus line is electrical, optical, or radio-controlled (col. 3, ll. 2-3), wherein the bus line is electrical.

13. As per claim 13, Jensen teaches the safety bus system comprising wherein the at least one bus line includes at least one signal line (Fig. 1, ref. 70, 90; col. 4, ll. 63-67 and col. 5, ll. 15-27), wherein the signal line is the control signaling line (Fig. 2, ref. 90) or the sensor signaling line (Fig. 1, ref. 90).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen et al. (US Patent 4,817,009) in view of Applicant's Admitted Prior Art (AAPA).

Jensen teaches all the limitations of claim 1 as discussed above, wherein Jensen teaches the safe bus system may be implemented in almost all control system utilizing electrical, pneumatic, mechanical or hydraulic signals (col. 3, ll. 15-20).

Art Unit: 2181

Jensen does not expressly teach the safe bus system to be utilized in a tabletting machine.

AAPA teaches a rotary tabletting press in a bus system comprising control signaling from sensors and actuators, wherein the signaling utilizes lines for wiring (Specification, [003]-[004]).

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include AAPA's rotary tabletting press into Jensen's safe bus system.

Therefore, it would have been obvious to combine AAPA with Jensen because not only is Jensen's safe bus system may be implemented in almost all control system using a diverse variety of signaling methodology, the combination would further provide the benefit of implementing a more robust control for the bus system by utilizing a master signal in combination with a plurality of independent tracking signals (Jensen, col. 1, l. 64 to col. 2, l. 9).

Art Unit: 2181

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun-Kuan (Mike) Lee whose telephone number is (571) 272-0671. The examiner can normally be reached on 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fritz M. Fleming can be reached on (571) 272-4145. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

C.K.L.
08/11/2006

Fritz M. Fleming
FRITZ FLEMING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

8/15/2006